DOCUMENT RESUME

ED 396 153 CE 071 896

AUTHOR	Stites, Regie; And Others
TITLE	Standards for Adult Literacy: Focal Points for Debate.
INSTITUTION	National Center on Adult Literacy, Philadelphia, PA.
SPONS AGENCY	Office of Educational Research and Improvement (ED), Washington, DC.
REPORT NO	NCM-TR-95-04
PUB DATE	Nov 95
CONTRACT	R117Q00003
NOTE	33p.
AVAILABLE FROM	National Center on Adult Literacy, Publications, 3910 Chestnut Street, Philadelphia, PA 19104-3111 (order no. TR95-04).
PUB TYPE	Information Analyses (070)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Adult Basic Education; *Adult Literacy; Competency Based Education; *Evaluation Methods; Functional Literacy; *Literacy Education; *Standards; Student Evaluation

ABSTRACT

Due to fragmentation of the field, framing and engaging in debates over adult literacy standards have been particularly difficult. The discourse of adult literacy standards reflects this fragmentation. The terms content standards and opportunity-to-learn (OTL) standards have typically not been used. The term performance standards has been used inconsistently and too generally. Goals 2000 and related national-level policies call for development of a voluntary system of standards to raise expectations and make schools and students accountable for higher levels of performance. Preliminary efforts to define content standards have focused on definitions of workplace competencies. Relatively little attention has been given to more broadly defined conceptions of functional literacy knowledge and skills. Although the National Adult Literacy Survey represents advancement in the assessment of functional literacy skills, work is needed to develop more authentic, performance-based assessments. Efforts to develop OTL standards have been focused on program quality indicators and professionalization. The particular characteristics of the field of adult literacy call for development of new forms of standards to meet the needs of equity in access and outcomes, coordination of service provision, and sensitivity to the learning needs of an increasingly diverse population. Adult educators and learners have a special stake in standards and need to be actively involved in all areas of standards setting for adult literacy. (Contains 71 references.) (YLB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 396 153

NCAL

NATIONAL CENTER ON ADULT LITERACY

STANDARDS FOR ADULT LITERACY

FOCAL POINTS FOR DEBATE

Regie Stites
Ellen Foley
Daniel A. Wagner
National Center on Adult Literacy
University of Pennsylvania

NCAL TECHNICAL REPORT TR95-04
NOVEMBER 1995

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

CE071206

BEST COPY AVAILABLE

STANDARDS FOR ADULT LITERACY

FOCAL POINTS FOR DEBATE

Regie Stites
Ellen Foley
Daniel A. Wagner
National Center on Adult Literacy
University of Pennsylvania

NCAL TECHNICAL REPORT TR95-04
NOVEMBER 1995

This work was supported by funding from the National Center on Adult Literacy at the University of Pennsylvania, which is part of the Education Research and Development Center Program (Grant No. R117Q00003) as administered by the Office of Educational Research and Improvement, U.S. Department of Education, in cooperation with the Departments of Labor and Health and Human Services. The findings and opinions expressed here do not necessarily reflect the position or policies of the National Center on Adult Literacy, the Office of Educational Research and Improvement, or the U.S. Department of Education.

NATIONAL CENTER ON ADULT LITERACY, UNIVERSITY OF PENNSYLVANIA, 3910 CHESTNUT STREET, PHILADELPHIA, PA 19104-3111

NATIONAL CENTER ON ADULT LITERACY
UNIVERSITY OF PENNSYLVANIA
3910 CHESTNUT STREET
PHILADELPHIA, PA 19104-3111
PHONE (215) 898-2100 FAX (215) 898-9804

The National Center on Adult Literacy (NCAL) was established in 1990 by the U.S. Department of Education, with co-funding from the Departments of Labor and Health and Human Services. The mission of NCAL addresses three primary challenges: (a) to enhance the knowledge base about adult literacy; (b) to improve the quality of research and development in the field; and (c) to ensure a strong, two-way relationship between research and practice. Through applied research and development and dissemination of the results to researchers, policymakers, and practitioners, NCAL seeks to improve the quality of adult literacy programs and services on a nationwide basis. NCAL serves as a major operating unit of the Literacy Research Center at the University of Pennsylvania.

NCAL publications to date include:

May 1992 *Matching Literacy Testing With Social Policy: What Are the Alternatives?*
Richard L. Venezky *(PB92-01, 7 pages)*

Oct 1992 *Life-Span and Life-Space Literacy: Research and Policy in National and International Perspectives*
Daniel A. Wagner *(OP92-01, 15 pages)*

Oct 1992 *Expanding Theories of Adult Literacy Participation*
Karen Reed Wikelund, Stephen Reder, & Sylvia Hart-Landsberg *(TR92-01, 30 pages)*

Oct 1992 *Invitations to Inquiry: Rethinking Staff Development in Adult Literacy Education*
Susan L. Lytle, Alisa Belzer, & Rebecca Reumann *(TR92-02, 44 pages)*

Dec 1992 *Developing the Professional Workforce for Adult Literacy Education*
Susan L. Lytle, Alisa Belzer, & Rebecca Reumann *(PB92-02, 11 pages)*

Jan 1993 *The Analysis of Adult Literacy: Problems in Factor Analysis Bib-Spiralled Item Administration*
David Kaplan *(OP93-01, 18 pages)*

Mar 1993 *The Impact of Workplace Literacy Programs: A New Model for Evaluation of Workplace Literacy Programs*
Larry Mikulecky & Paul Lloyd *(TR93-02, 180 pages)*

Mar 1993 *Literacy and Machines: An Overview of the Use of Technology in Adult Literacy Programs*
Terilyn C. Turner *(TR93-03, 86 pages)*

Jun 1993 *Myths and Misconceptions in Adult Literacy: A Research and Development Perspective*
Daniel A. Wagner *(PB93-01, 10 pages)*

Jun 1993 *Literacy and Development: Rationales, Assessment, and Innovation*
Daniel A. Wagner *(IP93-01, 50 pages)*

Jun 1993 *Early Childhood, Family, and Health Issues in Literacy: International Perspectives*
Laurel D. Puchner *(IP93-02, 45 pages)*

Sep 1993 *What Makes Workers Learn? The Role of Incentives in Workplace Education and Training*
Donald Hirsch & Daniel A. Wagner (Eds.) *(IP93-03, 243 pages)*

Sep 1993 *Prison Literacy: Implications for Program and Assessment Policy*
Anabel Newman, Warren Lewis, & Carolyn Beverstock *(TR93-01, 219 pages)*

Sep 1993 *Management Information Systems in Adult Education: Perspectives From the States and From Local Programs*
Mark A. Kutner, Lenore Webb, Rebecca Herman, & Pelavin Associates, Inc. *(TR93-04, 150 pages)*

Sep 1993 *What Can Employers Assume About the Literacy Skills of GED Graduates?*
David Kaplan & Richard L. Venezky *(TR93-05, 45 pages)*

BEST COPY AVAILABLE

NCAL publications to date (continued)

Sep 1993 *Should Reading-Disabled Adults Be Distinguished From Other Adults Seeking Literacy Instruction? A Review of Theory and Research*
Anne E. Fowler & Hollis S. Scarborough *(TR93-07, 101 pages)*

Sep 1993 *When Less Is More: A Comparative Analysis for Placing Students in Adult Literacy Classes*
Richard L. Venezky, Page S. Bristow, & John P. Sabatini *(TR93-08, 46 pages)*

Sep 1993 *Metacognitive Aspects of Adult Literacy*
Scott G. Paris & Andrea Parecki *(TR93-09, 44 pages)*

Nov 1993 *Teamwork and Literacy: Learning From a Skills-Poor Position*
Sylvia Hart-Landsberg & Steve Reder *(TR93-06, 63 pages)*

Nov 1993 *Motivations for Learning: Voices of Women Welfare Reform Participants*
Karen Wikelund *(TR93-10, 54 pages)*

Nov 1993 *Initiating Practitioner Inquiry: Adult Literacy Teachers, Tutors, and Administrators Research Their Practice*
Susan L. Lytle, Alisa Belzer, & Rebecca Reumann *(TR93-11, 69 pages)*

Nov 1993 *Coalition Building for Adult Literacy: Historical and Organizational Perspectives*
Anabel P. Newman & Bernadette Lehman *(TR93-13, 68 pages)*

Nov 1993 *Effective Service Delivery in Adult Literacy Programs: A Policy Review and Recommendations*
Judith Ann Koloski *(TR93-14, 46 pages)*

Dec 1993 *Issues and Challenges in Adult Numeracy*
Iddo Gal *(TR93-15, 62 pages)*

Dec 1993 *Adult Literacy Training and the Integration of Human Services*
Elizabeth R. Reisner *(TR93-16, 30 pages)*

Apr 1994 *Measuring Gain in Adult Literacy Programs*
Richard L. Venezky, Page S. Bristow, & John P. Sabatini *(TR93-12, 24 pages)*

Apr 1994 *Understanding Family Literacy: Conceptual Issues Facing the Field*
Vivian L. Gadsden *(TR94-02, 32 pages)*

Apr 1994 *Children, Parents, and Families: An Annotated Bibliography on Literacy Development In and Out of Program Settings*
Vivian L. Gadsden, Ludo C. P. Scheffer, & Joel Hardman *(TR94-04, 84 pages)*

Jun 1994 *Literacy Transfer: A Review of the Literature*
Larry Mikulecky, Peggy Albers, & Michele Peers *(TR94-05, 21 pages)*

Jun 1994 *Instruction and Assessment for Limited-English-Proficient Adult Learners*
Ronald W. Solórzano *(TR94-06, 33 pages)*

Jun 1994 *Early Warning Signs of Functional Illiteracy: Predictors in Childhood and Adolescence*
Nazli Baydar, Jeanne Brooks-Gunn, & Frank F. Furstenberg *(OP94-01, 13 pages)*

Jul 1994 *Use It or Lose It? The Problem of Adult Literacy Skill Retention*
Daniel A. Wagner *(TR94-07, 27 pages)*

Jul 1994 *Technology: New Tools for Adult Literacy*, Videoconference Participant Materials
Joyce Harvey-Morgan, Christopher Hopey, & R. Karl Rethemeyer (Eds.)
(PR94-01, 58 pages)

Sep 1994 *Supply and Demand for Literacy Instruction in the United States*
Richard L. Venezky & Daniel A. Wagner *(TR94-10, 13 pages)*

Sep 1994 *The Professionalization of the Teacher in Adult Literacy Education*
Timothy Shanahan, Maureen Meehan, & Stephen Mogge *(TR94-11, 20 pages)*

NCAL publications to date (continued)

Sep 1994 *The Role of Literacy in the Wealth of Individuals and Nations*
Sue E. Berryman *(TR94-13, 15 pages)*

Oct 1994 *Abilities and Competencies in Adulthood: Life-Span Perspectives on Workplace Skills*
Jacqui Smith & Michael Marsiske *(TR94-12, 36 pages)*

Oct 1994 *Proceedings. Conference on Adult Mathematical Literacy*
Iddo Gal & Mary Jane Schmitt (Eds.) *(PR94-02, 130 pages)*

Nov 1994 *Literacy and Adults With Developmental Disabilities*
Karen A. Erickson, David A. Koppenhaver, & David E. Yoder *(TR94-15, 31 pages)*

Nov 1994 *Adult Basic Skills in OECD Countries: Policy Issues and a Research Agenda*
David Stern & Albert Tuijnman *(IP94-01, 12 pages)*

Dec 1994 *Who Counts in Adult Literacy Programs? A National Survey of Numeracy Education*
Iddo Gal & Alex Schuh *(TR94-09, 20 pages)*

Dec 1994 *Adult Numeracy Instruction: A New Approach,* Videoconference Participant Packet
Iddo Gal, Lynda Ginsburg, Ashley Stoudt, R. Karl Rethemeyer, & Caroline Brayer Ebby
(PR94-04, 58 pages)

Dec 1994 *Literacy and Welfare Reform: Are We Making the Connection?*
Elena Cohen, Susan Golonka, Rebecca Maynard, Theodora Ooms, & Todd Owen *(TR94-16, 47 pages)*

Jan 1995 *Self-Assessed Skill Needs and Job Performance*
Peter Cappelli & Nikolai Rogovsky *(TR94-08, 12 pages)*

Jan 1995 *Literacy and Voting Behavior: A Statistical Analysis Based on the 1985 Young Adult Literacy Survey*
David Kaplan & Richard L. Venezky *(TR94-14, 13 pages)*

Jan 1995 *Literacy and Older Adults in the United States*
Gail Weinstein-Shr *(TR94-17, 25 pages)*

Jan 1995 *Proxy Measurement of Adult Basic Skills: Lessons From Canada*
T. Scott Murray *(TR94-18, 18 pages)*

Jan 1995 *Using Large-Scale Assessment Results to Identify and Evaluate Generalizable Indicators of Literacy*
Irwin S. Kirsch & Ann Jungeblut *(TR94-19, 14 pages)*

Jan 1995 *Native Literacy and Language Roundtable Proceedings*
Joyce Harvey-Morgan (Ed.) *(PR94-03, 26 pages)*

Mar 1995 *The Military Experience and Workplace Literacy: A Review and Synthesis for Policy and Practice*
Thomas Sticht *(TR94-01, 78 pages)*

Apr 1995 *What Works? Literacy Training in the Workplace,* Videoconference Participant Materials
Joyce Harvey-Morgan (Ed.) *(PR95-01, 38 pages)*

May 1995 *Adult Literacy: The Next Generation*
An NCAL White Paper *(TR95-01, 29 pages)*

Nov 1995 *Making Sense of Technology Terminology for Adult Literacy: A Glossary and Annotated Bibliography*
Alycia Donohoe, Joseph Campbell, Camille Ciggs, R. Karl Rethemeyer, & Christopher Hopey *(PG95-01, 47 pages)*

Nov 1995 *Technology Planning for Adult Literacy*
Christopher E. Hopey & Joyce Harvey-Morgan *(PG95-02, 45 pages)*

Nov 1995 *Funding Technology in Adult Literacy*
Christopher E. Hopey & Joyce Harvey-Morgan *(PG95-03, 64 pages)*

Nov 1995 *Making the Right Choice: Evaluating Computer Software and Hardware for Adult Literacy Instruction*
Christopher E. Hopey, R. Karl Rethemeyer, & Jennifer A. Elmore *(PG95-04, 54 pages)*

Nov 1995 *Joining the On-Line Community: An Introduction for Adult Literacy*
R. Karl Rethemeyer *(PG95-05, 146 pages)*

NCAL publications to date (continued)

Nov 1995 *Comparing Applied Literacy and Basic Skills Tests as Measures of Adult Literacy Performance*
Richard L. Venezky, John P. Sabatini, & Page S. Bristow *(TR95-03, 48 pages)*

Nov 1995 *Standards for Adult Literacy: Focal Points for Debate*
Regie Stites, Ellen Foley, & Daniel A. Wagner *(TR95-04, 34 pages)*

Nov 1995 *Adult Literacy in the United Kingdom: A History of Research and Practice*
Brian V. Street *(TR95-05, 54 pages)*

Nov 1995 *What Does "100% Juice" Mean? Exploring Adult Learners' Informal Knowledge of Percent*
Lynda Ginsburg, Iddo Gal, & Alex Schuh *(TR95-06, 44 pages)*

Nov 1995 *Learning to Read: Literacy Acquisition by Children and Adults*
Charles A. Perfetti & Maureen A. Marron *(TR95-07, 56 pages)*

Apr 1996 *The Infrastructure of Adult Literacy Education: Implications for Policy*
Hal Beder *(TR96-01, 32 pages)*

Apr 1996 *Evaluation of Workplace Literacy Programs: A Profile of Effective Instructional Practices*
Larry Mikulecky & Paul Lloyd *(TR96-03, 58 pages)*

Apr 1996 *A Review of Recent Workplace Literacy Programs and a Projection of Future Challenges*
Larry Mikulecky, Paul Lloyd, Lisa Horwitz, Sharon Masker, & Patti Siemantel
(TR96-04, 54 pages)

Apr 1996 *Developing and Evaluating Workplace Literacy Programs: A Handbook for Practitioners and Trainers*
Larry Mikulecky, Paul Lloyd, Jamie Kirkley, & Julie Oelker *(PG96-01, 112 pages)*

May 1996 *Families and Literacy: Making Sense of the Issues*, Videoconference Participant Materials
Joyce Harvey-Morgan, Ashley Stoudt, & Vivian L. Gadsden (Eds.) *(PR96-01, 46 pages)*

May 1996 *Moving Forward the Software Development Agenda in Adult Literacy: A Report Based on the Adult Literacy Software Development Conference*
Joyce Harvey-Morgan (Ed.) *(CP96-01, 70 pages)*

May 1996 *Instructional Strategies for Teaching Adult Numeracy Skills*
Lynda Ginsburg & Iddo Gal *(TR96-02, 32 pages)*

Information on ordering of NCAL publications may be addressed to Dissemination at NCAL.
Revised May 14, 1996

NCAL MANAGEMENT

Daniel A. Wagner, Director
Richard L. Venezky, Co-Director for Research and Development
Joyce Harvey-Morgan, Associate Director
Vivian L. Gadsden, Associate Director
Sandra K. Stewart, Manager of Dissemination
Mary O. Russell, Administrative Coordinator
Janet C. Smith, Editor
R. Karl Rethemeyer, Manager, Literacy Technology Laboratory

NCAL SENIOR PROJECT DIRECTORS

María Carlo, University of Pennsylvania
Vivian L. Gadsden, University of Pennsylvania
Iddo Gal, University of ennsylvania
Larry Mikulecky, Indiana University
Scott G. Paris, University of Michigan
Laurel D. Puchner, University of Pennsylvania
Stephen Reder, Northwest Regional Educational Laboratory
R. Karl Rethemeyer, University of Pennsylvania
Regie Stites, University of Pennsylvania
Richard L. Venezky, University of Delaware
Daniel A. Wagner, University of Pennsylvania

NCAL NATIONAL ADVISORY PANEL

Chair: Gloria Twine Chisum, Vice-Chair, University of Pennsylvania Board of Trustees
Richard C. Anderson, Director, Center for the Study of Reading, University of Illinois
Joan D. Baraloto, Director, Education and Family Initiatives, USA Today
James Bowling, Executive Director, Ohio Department of Education, Adult Basic and Literacy Education
Jack Bowsher, Director of Education (ret.), IBM, Inc.
Jeanne Chall, Professor, Graduate School of Education, Harvard University
John Cole, Director, The Center for the Book, Library of Congress
The Honorable William F. Goodling, U.S. Representative, Pennsylvania
Barbara Kapinus, Director, State Education Assessment Center, Council of Chief State School Officers
Carl Kaysen, David W. Skinner Chair of Political Economy, Massachusetts Institute of Technology
Irwin Kirsch, Executive Director, Language Learning and Assessment Group, Educational Testing Service
Noreen Lopez, Manager, Adult Education Product Development, Contemporary Books, Inc.
Marciene Mattleman, Executive Director, Philadelphia Futures
Geraldine Novelo, Deputy Director (ret.), Instituto Nacional para la Educación de los Adultos, MexicoPennsylvania
Joyce Harvey-Morgan, University of Pennsylvania
Susan L. Lytle, University of P
Van D. Ooms, Senior Vice President and Director of Research, Committee for Economic Development
Bernard P. Reca, Vice President, Bell Atlantic Network Services, Inc.
Anthony Sarmiento, Assistant Director, Human Resources Development Institute, AFL-CIO
Robert Schwartz, Program Director, Education, Pew Charitable Trusts
Senator Paul Simon, U.S. Senator, Illinois
Dorothy Strickland, Professor, Graduate School of Education, Rutgers University
Francis X. Sutton, Vice President (ret.), Ford Foundation
Peter Waite, Executive Director, Laubach Literacy Action

NCAL EDITORIAL REVIEW COMMITTEE

Eunice Askov, Pennsylvania State University
Hal Beder, Rutgers University
Virginia Berninger, University of Washington
Marilyn Binkley, National Center for Educational Statistics, U.S. Department of Education
Ben Burenstein, Drexel University
Betty Conaway, Baylor University

BEST COPY AVAILABLE

NCAL EDITORIAL REVIEW COMMITTEE (CONTINUED)

***Aydin Durgunoglu**, University of Illinois at Urbana*
***Marcia Farr**, University of Illinois at Chicago*
***John Fleischman**, Media Services and OTAN, Sacramento County Office of Education*
***Beth Foley**, Utah State University*
***Maggie Gaines**, Baltimore City Literacy Corp.*
***Sheryl Gowen**, Georgia State University*
***Karl Haigler**, Salem Company*
***Keiko Koda**, Ohio University*
***Kenneth Levine**, University of Nottingham, UK*
***Noreen Lopez**, Adult Education Product Development, Contemporary Books, Inc.*
***Mary Massie**, Helene Curtis Industries*
***Peter B. Mosenthal**, Syracuse University*
***Judith Norback**, Center for Skills Enhancement, Inc.*
***Richard K. Olson**, University of Colorado*
***Janice Phillips**, Assistant Professor, AED Department, William Rainey Harper College*
***Jorie Philippi**, Principal, Performance Plus Learning Consultants, Inc., Charleston, West Virginia*
***Ronald Pugsley**, Office of Vocational & Adult Education, U.S. Department of Education*
***Thomas Reeves**, University of Georgia*
***Judith Sotir**, Manager, ITD Center for Excellence, Waunsobee Community College*
***Timothy Shanahan**, University of Illinois at Chicago*
***Wilma Sheffer**, Workforce Skills Enhancement, St. Louis Community College*
***Ronald Solórzano**, Occidental College*
***Keith Stanovich**, Department of Applied Psychology, Ontario Institute for Studies in Education*
***Sondra Stein**, National Institute for Literacy*
***H. Lee Swanson**, University of California, Riverside*
***Sally Waldron**, SABES World Education Inc.*
***Terrence G. Wiley**, California State University Long Beach*

TABLE OF CONTENTS

Table of Contents	*i*
Abstract	*iii*
Introduction	1
The Language and Logic of Education Standards	2
Goals 2000 and Standards for Adult Literacy	4
Varieties of Standards in Practice	6
Challenges	14
Conclusions	17
References	*19*

STANDARDS FOR ADULT LITERACY

FOCAL POINTS FOR DEBATE

Regie Stites
Ellen Foley
Daniel A. Wagner
National Center on Adult Literacy
University of Pennsylvania

Abstract

The prospect of developing content, performance, and opportunity-to-learn standards for adult literacy has generated much discussion. However, the lack of a common vocabulary and the relatively narrow range of interests represented in these discussions have been major impediments to progress in developing standards for adult literacy. This paper reviews literature on the theory and practice of education standards and summarizes the progress toward designing content, performance, and opportunity-to-learn standards for adult literacy. This review helps to highlight the technical issues and challenges to standards-based reform of the field. The development of efficient and equitable accountability systems for adult literacy programs will require ongoing efforts to define desirable knowledge and skills and to develop more authentic measures of learning outcomes. The particular challenges posed by issues of equity, diversity, and coordination of service provision call for a broadly based participatory process in developing and implementing adult literacy standards.

INTRODUCTION

Some problems, as they say in China, cannot be cut with one stroke of the knife. This is certainly true in the case of developing a system of standards for adult literacy in the United States. Driven by a broad range of policy initiatives at the federal, state, and local levels, a variety of efforts to set standards for adult literacy are currently underway. For the latter half of the 1990s, the political will to develop standards for adult literacy is likely to remain strong, even as the focus of setting standards for adult literacy shifts from the national to the state and local levels. While it appears certain that issues raised by the desire for increased accountability will remain in the forefront of standards discussions, it remains far from clear what sorts of standards are needed or desired by the various stakeholders.

This paper seeks to create a measure of coherence out of a highly fragmented discourse. Many of the writers cited in this review might not choose to characterize their work as having much, if anything, to do with the general issue of standards for adult literacy. Even among those who do explicitly address adult literacy standards issues, there seems to be little agreement on what those issues are or even on the meaning of the terms and concepts used to discuss them. Our intention is not to provide definitive answers to the many separate questions around which discussions have begun, but rather to clarify what is at stake, to raise additional issues for discussion, and to explore the implications of established patterns of participation in setting standards for adult literacy. Furthermore, our focus is on the technical as opposed to the political issues raised by standards. Although we recognize that the general question of whether or not there will be standards for adult literacy will be decided in the political arena, we feel that any future discussions of adult literacy standards will be fruitful only to the extent that they are guided by a clear vision of the technical issues raised by the design and implementation of various forms of standards.

Parsing the general question of standards for adult literacy into more meaningful and manageable pieces requires an elaboration of the language and logic of the standards reform movement. Although standards for education can take many different forms and serve a variety of societal functions (see Pearson, 1993; Thomas 1994), American national policies have called for the development of three generic types of education standards: *content*, *performance*, and, at times, *opportunity-to-learn* (OTL) standards (for definitions see NEGP, 1994).

The impetus for the development of national goals and standards for American education were concerns over the quality of the American workforce and international comparisons of educational achievement that seemed to show low or mediocre levels of performance by American students. These concerns found expression in the 1989 formulation of the America 2000 educational reform agenda proposed by the National Governors' Association (NGA) and President Bush. America 2000 defined six National Education Goals. Goal 5 concerned adult literacy and lifelong learning. The America 2000 agenda of educational reform through the setting of standards has been incorporated into a

host of recent federal policies and legislation, including the National Literacy Act of 1991(NLA) and the Goals 2000: Educate America Act (Goals 2000) passed by the U.S. Congress in 1994.

Setting standards in the field of adult literacy has generally lagged behind efforts in K-12 subject areas. As of this writing, efforts to set standards are being undertaken by professional organizations representing eleven K-12 subject areas (NEGP, 1994). The leader and pacesetter in these efforts has been the National Council of Teachers of Mathematics (NCTM). Perhaps the central lesson of NCTM's decade-long experience (see Ball, 1992) and of the experiences of other subject area organizations in attempting to follow their lead has been that moving from the theory of standards and standards policy to the actual process of setting standards has required customization of the forms and functions of standards to suit the particular needs and characteristics of each subject area.

Much is at stake in the development of standards for adult literacy. However, to date, only a fairly narrow range of interests—largely those of business and government—has been represented in efforts to set standards for adult literacy. To ensure equity and to improve chances for success in raising expectations and achievement through the setting of education goals and standards, there is a need to broaden participation in adult literacy standards setting. There is a particular need for greater inclusion of the voices and interests of adult educators in standards debates. Given the relative age and maturity of learners as well as the noncompulsory nature of most adult education, it would also be wise to include adult learners in the process of setting standards. Thus far, adult teachers and learners have not participated in setting standards for adult literacy to a degree that is commensurate with their stakes in the outcomes of this process.

The wide variety of settings, goals, and instructional programs that are included within the general domain of adult literacy and adult basic education (ABE) poses challenges to setting standards that, in many respects, are unlike those faced by efforts in other subject areas. Issues of coordination, equity, and diversity pose particular challenges to setting standards for the field of adult literacy. These issues may also be seen as starting points for the development of new forms of standards to suit the particular quality and accountability needs of the field.

THE LANGUAGE AND LOGIC OF EDUCATION STANDARDS

Before specifying the issues raised by the prospect of standards for adult literacy, it is necessary to develop a common understanding of a number of key terms and concepts employed in discussions of standards policy. For this purpose, it will be useful to review the definitions put forward by Husen and Tuijnman (1994) in a recent international review of systems for monitoring educational performance.

Husen and Tuijnman begin by differentiating *goals* and *standards*. Educational *goals*, in their view, "are usually couched in very general terms and are not directly amenable to measurement" (1994, p. 3). Such goals are typically defined by the central government at the national level. A *standard*, on the other hand, "refers to a degree of excellence required for particular purposes, a measure of what is adequate, a socially and practically desired level of performance" (p. 2). More specifically, *educational standards* are usually described in terms of a "desired level of content mastery or performance" (p. 2).

In the language of American national educational policy, content standards define "everything a student should know and be able to do" (NCEST, 1992, p. 9). In other words, they describe the range of desirable knowledge and skills within a subject area. Performance standards specify how much students should know and be able to do. Thus, while content standards are primarily of use in framing a curriculum, performance standards establish benchmarks to shape expectations and to provide a basis for measuring learning outcomes and for imposing rewards and sanctions. Opportunity-to-learn (OTL) standards were proposed as a response to concerns over the potential inequity of raising expectations for all students without ensuring that all have an equal opportunity to meet higher expectations (NCEST, 1992). OTL standards are thus specifications of the educational inputs and resources required to meet expectations for student (and school) performance. Husen and Tuijnman (citing the National Academy of Education, 1993) summarize the connections among these three types of standards as follows:

> . . . for meaningful and fair performance standards to be set, it is necessary to define the exact content areas to which these standards shall apply. Before performance can be fairly assessed, it is moreover necessary to determine whether all students have had adequate opportunities to learn the prescribed content. (p. 2)

In this ideal model of a system of educational standards, content, performance, and OTL standards are conceived of as interdependent. A comprehensive system of education standards would require that standards of all three types be developed and that the definition of content standards precede and provide the basis for the development of performance and OTL standards. In practice, however, organizations engaged in setting standards for K-12 subject areas have had to find their own paths through the standards-setting process. They have typically found it necessary to diverge from the ideal model in defining content, performance, and OTL standards as well as in developing additional types of standards to suit the particular characteristics of their subject areas (for a summary, see O'Neil, 1993).

Educational standards can perform a wide variety of functions, but the key function for standards in recent American policy discussions has been to support the development of accountability mechanisms. The functions that standards serve within an accountability system can be delineated by the terms *assessment*, *monitoring*, and *evaluation*. Husen and Tuijnman (1994, p. 3) define *assessment* as "techniques used in collecting information about educational outcomes." *Monitoring* involves the collection of assessment data, "but is not necessarily restricted to outcome variables . . . [and] must also take account of contextual information and measures of resource inputs and processes of education." Although monitoring and *evaluation* are closely

connected, the latter tends to refer to the use of data for making a subjective judgment about the quality of a program. Husen and Tuijnman explain the relationship of assessment, monitoring, and evaluation to *accountability* in the following way:

> The systematic collection of evidence about educational performance, as in an indicator system for the monitoring of educational progress, is an important element of evaluation in a model of *accountability*. Monitoring refers to ways in which accountability is ensured by using the evaluative judgment for purposes of influence in a managerial or other control system. (p. 4)

This passage provides a succinct yet apt description of the rationale of current national policy on educational goals and standards in the United States. It also highlights the critical role of assessment in any system of educational goals and standards aimed at accountability.

GOALS 2000 AND STANDARDS FOR ADULT LITERACY

As noted above, the movement toward national goals and standards for American education was largely motivated by concerns for the future quality of the American workforce raised by relatively weak performances by American students in international comparisons of educational achievement. These concerns found their most influential expression in *A Nation at Risk* (National Commission on Excellence in Education, 1983). The publication of *A Nation at Risk* had the effect of focusing public attention on the need for national level solutions to problems of educational quality. In the mid-1980s, efforts to address educational problems at the national level were spearheaded by the National Governor's Association (NGA) (see Alexander, 1986). Around this time, through groups such as The Conference Board (Berenbeim, 1991; Lund & McGuire, 1990; Lund & Wild, 1993), the Committee for Economic Development (CED, 1988), and the Business Roundtable, business leaders also began to take a more active interest in national educational development and policy. By the end of the decade, both business leaders and government policymakers began to see national educational goals and standards as the best method for improving the quality of the nation's stock of human capital and for keeping American industry competitive in the international marketplace.

In 1989, the NGA met with President Bush for an Education Summit and developed the America 2000 educational reform proposal. At the heart of the America 2000 proposal, there were six National Education Goals. These goals called for excellence in American education and were generally aimed at raising expectations for levels of achievement by American students and schools. Among the six goals was one that directly addressed the need for a literate population. Goal 5: Adult Literacy and Lifelong Learning stated the following:

> By the year 2000, every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship.

Each of the six goals defined by the NGA in 1989 was accompanied by a list of objectives. These objectives were more specific than the goals themselves, and they were meant to identify areas for immediate action. Five such objectives were defined for Goal 5: Adult Literacy and Lifelong Learning. None of the objectives made explicit reference to literacy and the last two objectives were related to higher education. However, the first three objectives did address issues in the provision of adult basic education as follows:

- Every major American business will be involved in strengthening the connection between education and work.
- All workers will have the opportunity to acquire the knowledge and skills, from basic to highly technical, needed to adapt to emerging new technologies, work methods, and markets through public and private educational, vocational, technical, workplace, or other programs.
- The number of high-quality programs, including those at libraries, that are designed to serve more effectively the needs of the growing number of part-time and mid-career students will increase substantially.

The goals and objectives of the America 2000 proposal were adopted by the U.S. Department of Education in 1992 and were subsequently included in a legislative initiative entitled the Goals 2000: Educate America Act. By the time the Goals 2000 legislation was submitted to Congress in 1993, the number of goals had been expanded from six to eight and the objectives were elaborated to include a set of 16 core indicators.

The 1994 National Goals Report prepared by the National Education Goals Panel (NEGP) explains that the 16 core indicators were designed to be "comprehensive across the Goals; most critical in determining whether the Goals are actually achieved; policy-actionable; and updated at frequent intervals, so that the Panel can provide regular progress reports" (NEGP, 1994, pp. 5-6). Furthermore, these core indicators are meant to provide general criteria for policymakers, educators, and the public in order to measure progress in raising the level of the nation's educational health; to give policymakers and the public a better idea of what they can do to improve educational performance; to clearly communicate benchmarks for expected levels of performance; and to identify and remove gaps in national and state level data that might get in the way of the Goal Panel's task of measuring progress toward the National Goals. Among the three indicators that are specified for Goal 6 (originally Goal 5): Adult Literacy and Lifelong Learning in the 1994 Goals Report, the first is of particular interest.

> Indicator 10: Adult literacy
> Increase the percentage of adults aged 16 and over who score at or above Level 3 in prose literacy on the National Adult Literacy Survey (NALS).

The choice of a level of performance on one of the three scales developed for the NALS (Kirsch et al., 1993) seems to have been primarily a matter of expedience. The reasons for this choice are not difficult to guess. NALS provided the first and only available comprehensive measure of literacy levels in the adult population of the nation. However, while NALS data is appropriate as an initial indicator, it falls considerably short in providing a basis for the development of performance standards for adult literacy (see below).

With the move toward the development of an indicator system, American policymakers, represented by the NEGP, are attempting to create a system of national oversight and accountability for the quality of education, including adult literacy education. The accountability system envisioned in current policies is in line with the ideal model of such a system as described earlier and, not coincidentally, is also similar to systems already in place in other Organisation for Economic Co-operation and Development (OECD) nations (see Bottani & Tuijnman, 1994). In other words, Goals 2000 and related national educational policies call for the development of a standards-based system of adult literacy education.

One portion of the Goals 2000: Educate America Act that is likely to have a significant formative influence on the development of standards for adult literacy is Title V, The National Skill Standards Act of 1994. With a goal of ensuring "a high skills, high quality, high performance workforce, including the most skilled front-line workforce in the world," the Skill Standards Act establishes a National Skill Standards Board (NSSB) for five years to initiate the development of a "voluntary national system of skill standards and of assessment and certification of skill standards." Informed by the Department of Education, Office of Vocational and Adult Education's study of Occupational Skill Standards projects (OVAE, 1992), the NSSB is charged with identifying occupational clusters as well as the skills and personal qualities needed to succeed in each cluster. When these tasks are completed, the NSSB will then encourage the development of a variety of voluntary certification and assessment systems for the skills. The Skill Standards Act also enables the NSSB to award grants to industry councils or other voluntary partnerships that want to develop skill standards. Twelve million dollars was appropriated for the establishment of the NSSB for fiscal year 1995.

VARIETIES OF STANDARDS IN PRACTICE

Goals 2000 promotes the widespread development of standards in American education. Coupled with the recent reauthorization of the Elementary and Secondary Education Act in 1994, Goals 2000 requires states to develop both performance and content standards in order to receive Title I funding. Goals 2000 also encourages the creation of OTL standards, but these are strictly voluntary.

Goals 2000 and other national educational policies calling for the development of standards have been prompted by a felt need to improve the nation's human capital. Standards for K-12 subject areas are aimed at raising expectations and supporting the conditions for higher levels of academic achievement and are thus intended, in the long run, to help create and sustain a more highly skilled and more internationally competitive workforce. Standards for adult literacy are aimed at improving workforce skills and knowledge more directly and immediately. Due to the differences in the aims, methods, and contexts of K-12 and adult education, the extent to which content, performance, OTL, or other forms of standards for adult literacy are possible or desirable is not yet clear.

CONTENT STANDARDS

Once educational goals and objectives have been established, the next logical step in developing standards for purposes of assessment, monitoring, and evaluation within an accountability system is the definition of content standards for each subject area. Work on content standards for K-12 subject areas is a way to define the broad outlines of subject matter that should be studied at various levels (see NCEST, 1992; Ravitch, 1992). One of the most common arguments made against development of national content standards for K-12 subject areas is that such standards would create a "standardized" national curriculum that would lack the diversity and flexibility seen by many to be one of the main strengths of the decentralized American educational system (Apple, 1993; Eisner, 1993). Proponents of standards have countered by arguing that content standards are meant to serve as general guides for curricular contents rather than specific requirements and that content standards should ideally be "general, visionary, and not at all prescriptive" (Porter, 1993, p. 25).

Although the definition of content standards for adult literacy in the sense of creating a framework for a national adult literacy curriculum is unlikely (and probably unwise for a variety of reasons; see Wagner, 1993), there are at least two separate arenas in which efforts are being made to define what every adult "should know and be able to do" in relationship to literacy. One such arena is the recently resurgent literature addressing the question of what constitutes functional literacy (see Venezky et al., 1990; Verhoeven, 1994). The other is comprised of the large body of work addressing issues of workforce readiness and workplace literacy (see, for example, Berenbeim, 1993; Chisman & Campbell, 1990; SCANS, 1991). Although these two discussions overlap at some points, they are distinguished by different core interests. The functional literacy literature is generally oriented toward a better understanding of the fundamental nature of literacy. The literature on workplace literacy, on the other hand, is more centrally concerned with the manner in which basic reading and writing are related to meeting the skill and knowledge demands of the workplace.

When it was formed in 1990, the Secretary's Commission on Achieving Necessary Skills (SCANS) was asked to "examine the demands of the workplace and whether [America's] young people are capable of meeting those demands" (SCANS, 1991, p. xv). This general mission was broken down into four tasks: to define skills needed for employment; to propose acceptable levels of proficiency in these skills; to suggest effective ways of assessing levels of proficiency; and finally, to develop a means of disseminating the results of the Commission's work to schools, businesses, and homes. The task of identifying

and defining skills was carried out in a five-stage process that entailed consultations with policymakers, business leaders, and a review of relevant research; the convening of expert panels; reviews of psychological, educational, and business databases; further consultations with research and business experts; and finally, analyses of skill demands of jobs in various areas of the economy (Whetzel, 1993). The result was a model of "workplace know-how" that specified desirable competencies in five domains and foundation skills in three domains. These competencies and foundation skills can be summarized below:

Competencies—effective workers can productively use the following:

- Resources—allocating time, money, materials, space, and staff;
- Interpersonal skills—working on teams, teaching others, serving customers, leading, negotiating, and working well with people from culturally diverse backgrounds;
- Information—acquiring and evaluating data, organizing and maintaining files, interpreting and communicating, and using computers to process information;
- Systems—understanding social, organizational, and technological systems, monitoring and correcting performance, and designing and improving systems; and
- Technology—selecting equipment and tools, applying technology to specific tasks, and maintaining and troubleshooting technologies.

The Foundation—competence requires the following:

- Basic skills—reading, writing, arithmetic and mathematics, speaking, and listening;
- Thinking skills—thinking creatively, making decisions, solving problems, seeing things in the mind's eye, and reasoning; and
- Personal qualities—individual responsibility, self-esteem, sociability, self-management, and integrity.(SCANS, 1991, p. vii)

As noted above, business groups motivated by an interest in producing a "world class workforce" have been among the key supporters of the National Education Goals. The work of SCANS in defining "workplace know-how" was a direct reflection of this particular interest. However, many educators and adult learners may present demands for literacy skills and knowledge that are substantially different from those defined by SCANS and supported by government and business leaders (see Barton, 1994; Leseman, 1994; Resnick & Resnick, 1977).

A truly comprehensive set of content standards for adult literacy would have to be founded upon a widely accepted and elaborated definition of literacy. Although the NALS, the NLA, and National Education Goal 6 (originally Goal 5) all contain what appear to be general definitions of literacy, the differences among these three closely related definitions reveal

the complexity of the definition problem. NALS was guided by a definition of literacy originally developed by a national panel of experts for the young adult literacy survey (YALS) assessment (Kirsch & Jungeblut, 1986) as follows:

> Using printed and written information to function in society, to achieve one's goals, and to develop one's knowledge and potential. (Kirsch et al., 1993, p. 2)

According to Campbell, Kirsch, and Kolstad (1992, pp. 9-10), the expert panel convened by the Educational Testing Service (ETS) to define literacy for the NALS started with this YALS assessment definition. After much discussion, the panel concluded that revising the definition "would narrow rather than broaden the concept of literacy" (p. 10) and therefore unanimously adopted the YALS assessment definition as a guide for the NALS. The drafters of the National Literacy Act of 1991, while borrowing language from the YALS/NALS definition, elaborated upon that definition as follows:

> For the purposes of this Act the term 'literacy' means an individual's ability to read, write, and speak in English, and compute and solve problems at levels of proficiency necessary to function on the job and in society, to achieve one's goals, and develop one's knowledge and potential. (National Literacy Act of 1991, Section 3)

It is a matter of perspective whether the specification of English, numeracy, and job-related proficiencies in the NLA wording narrows or broadens the definition of literacy. Although the wording of Goal 6 (see above) is even more general than the NALS and NLA definitions, the form of literacy proficiency linked to "the rights and responsibilities of citizenship" in Goal 6 is not clearly specified in either the NALS or the NLA definitions. Differences in emphasis aside, the basic problem with all three of these definitions in terms of providing guidance for the development of content standards is their high level of generality. When more detailed definitions of literacy are put forward, consensus tends to evaporate (see Venezky et al., 1990) and the lack of consensus on specific features of desirable literacy knowledge and skills at this level has been seen as an obstacle to creating effective and measurable programs (e.g., BCEL, 1992).

Current approaches or schools of thought regarding the nature of literacy can be roughly divided into three general types. One approach is to view basic literacy as the set of component skills or cognitive processes entailed in the encoding and decoding of written text (see Adams, 1990). Another approach sees the fundamental nature of literacy in the ability to accomplish a variety of everyday reading and writing tasks (see Guthrie & Greaney, 1991; Kirsch et al., 1993). A third approach is to assume the existence of a variety of literacies, each related to the communicative practices of a particular community, culture, or social context (see Levine, 1986; Lytle, 1991; Street, 1984). Although these different conceptualizations can be seen as interrelated, they imply rather different directions for the development of content standards for adult literacy.

Beder (1991) has argued that a nationally standardized curriculum for adult literacy is possible only if literacy is conceptualized as a set of skills that are independent of specific tasks and contexts. Yet the level of generality at which a context-independent conception of literacy can be stated does not provide an adequate basis for specific measures of outcomes to which programs might

aspire and against which they might be held accountable. The NALS, NLA, and Goal 6 definitions of literacy are all too broadly stated to be directly useful as guides to curriculum development. The chief value of SCANS and other more detailed work-related definitions of literacy would seem to be in the guidance that such definitions provide in developing a more refined understanding of the literacy skills required by particular types of work or occupational clusters. The principal risk is the narrowing effect that too much attention to work-related as opposed to other areas of literacy competencies could have on the contents, processes, and outcomes of the broader areas of adult literacy and ABE provision.

PERFORMANCE STANDARDS

Performance standards are the teeth in the smile of content standards. Once the range of desirable content in a subject area has been framed, the next step in the standards process is to develop performance standards to serve as the bases for measures of the extent to which students have acquired "enough" of that content. Because of the key role that they play in specifying measures of and acceptable levels for student outcomes (and program quality), performance standards are at the core of efforts to set standards for K-12 subject areas and for adult literacy. The NALS (Kirsch et al., 1993), while providing valuable data on the literacy profile of the American population, was only a small step toward the development of needed performance standards and measures of student outcomes and program quality (see further discussion of NALS below).

The Goals 2000 agenda has been characterized as "assessment-driven" reform. Both proponents (Simmons & Resnick, 1993) and critics (Apple, 1993) of the standards movement have judged that the ultimate success or failure of the movement will rest upon the degree to which new technologies for performance-based assessments can be perfected and accepted for general use. What makes performance standards distinct from more traditional achievement criteria is the linkage of such standards to more "authentic" and more complex measures of student performance. Performance-based assessments may take a variety of forms including exhibitions, investigations, portfolios of student work, or any other assessments that require learners to make use of prior knowledge, recent learning, and relevant skills in actively solving significant and realistic problems (Herman et al., 1992). One effect of the turn to performance standards and performance-based assessment has been to direct the attention of psychometricians away from issues of reliability and toward issues of validity (Messick, 1994). Tasks in performance-based assessments are typically longer, fewer in number, and scored in a more subjective manner than tasks in more traditional standardized tests, and this has raised concerns about the potential for bias and inequity in the use of such assessments, especially in high-stakes environments (see Darling-Hammond, 1994; Linn et al., 1991).

Alamparese (1990) has argued that the creation of performance standards for adult literacy is imperative because of the "press for program accountability" and the "need to 're-tool' the American workforce" (p. 111). But, so far, very little progress has been made in developing such standards. The design and implementation of performance standards for adult literacy must overcome two substantial problems. The first problem is the current

lack of appropriate and adequate measures of learning gain to serve the purposes of accountability. The second problem is related to weaknesses in the current infrastructure of adult literacy education delivery systems. The second problem compounds the first because even if more adequate assessments are perfected in the near future, there is no guarantee that local programs will have the capacity to make appropriate use of these assessments. The authors of the final report of the recently completed National Evaluation of Adult Education Programs (NEAEP) found that many local programs lacked the expertise to accurately assess their students (Young et al., 1994).

The lack of fit between the literacy skills measured by the NALS and those taught in most ABE classes raises questions about the appropriateness of using Level 3 on the NALS prose scale as a core indicator of progress toward the achievement of Goal 6: Adult Literacy and Lifelong Learning. Building on the functional literacy tests and scales developed by ETS for a previous study of literacy among young adults (Kirsch & Jungeblut, 1986), the NALS provided an unprecedented look at the distribution of literacy skills across a wide cross section of the U.S. population (Kirsch et al., 1993). Though the NALS has many strengths, it was never intended to serve as the basis for establishing performance standards for adult literacy. The selection of Level 3 of the NALS prose scale as an indicator of progress toward achieving Goal 6 is therefore highly problematic. Key among the perceived strengths of performance standards and the alternative forms of assessment that they support is the potential that they hold to clearly communicate expectations for student achievement and at the same time to more closely link classroom instruction and assessment (see Herman et al., 1992). NALS can do neither. The items on the NALS test were derived from matrices of text types and everyday literacy tasks, not from any theoretical model of functional literacy or component literacy skills. For this reason, NALS results are incompatible with the results of the basic skills tests (such as TABE) typically used by adult literacy programs (Venezky, 1992).

At least two substantial efforts are currently underway to develop assessments of workplace literacy. The ETS is producing a Workplace Literacy Test based on the NALS assessment framework (Latham & Reese, 1995) and researchers at the National Center for Research on Evaluation, Standards, and Student Testing (CRESST) have developed prototypes for performance measures of workplace competencies that build upon the SCANS framework (O'Neil, Allred, & Baker, 1992). The SCANS (1991) report proposes a five level rubric of proficiency levels for each of the Competencies and Foundation skills. These five levels are labeled *preparatory*, *work-ready*, *intermediate*, *advanced*, and *specialist*. CRESST researchers have begun to develop methods for assessing these proficiency levels following a strategy that includes analyses of the skill demands of particular occupations and the use of case studies to create a set of exemplars of abilities at each proficiency level for each occupational category.

While improved technologies for measuring workplace literacies and skills represent significant developments, such measures will not solve the critical problem of measuring learning gains for the purposes of accountability. For accountability systems to work, assessments will need to be developed that are capable of clearly communicating high expectations and serving as valid, reliable, feasible, and fair measures of adult literacy. Such measures are essential to the success of any standards-based education reform. Much work

remains to be done in developing performance standards and performance-based assessments for adult literacy and in training program staff in the use of such measures.

Opportunity-to-Learn Standards

For performance standards to be fair, students and others who will be held accountable for outcomes must have the opportunity to meet those standards. The fact that authentic assessments and performance standards do not ameliorate concerns with equity and in some ways exacerbate the problem of test bias, led to calls for the development of opportunity-to-learn (OTL) standards. The call for OTL standards was amplified in a National Council on Educational Standards and Testing (NCEST) report that recognized the potential inequity of holding children accountable for performance without determining whether the available resources and environment were adequate to promote academic achievement (NCEST, 1992). OTL standards are designed to illustrate an institution's capacity to provide this opportunity by measuring the adequacy of school variables, such as fiscal and human resources, the enacted curriculum, and the school climate.

OTL standards (also known as delivery standards) have been the subject of much debate in the elementary and secondary education policy arena. To their supporters, they hold the promise of equity, and to their detractors, they signify excessive governmental intervention (Lewis, 1992). The authors of the volume of standards for assessment for the National Council of Teachers of Mathematics (NCTM) warned that OTL standards provide policymakers and funding agencies with "both the opportunity to deal with inequities and to demand compliance" (NCTM, 1993, p. 232). On the one hand, OTL standards may serve as the means of disseminating knowledge of best practices and, at the same time, they may be used as yardsticks against which schools may be held accountable. This dual potential is the source of controversies that have developed over the desirability and need for OTL standards. Designing OTL standards as exemplars of best practices would ideally set levels for optimal performance that are beyond the reach of most programs so as to give those programs targets for improvement. Using OTL standards as accountability measures, particularly if such measures are tied to renewal of funding or certification, might have the effect of lowering standards to a level that most programs can be expected to satisfy. It would also open the door to costly litigation over the definition and measurement of what constitutes "adequate" education.

While there has been no explicit call for OTL standards as such, developing standards for program quality and for professional training and certification have been long-term concerns within the field of adult literacy. As noted above, the foundation of the National Skills Standards Board (NSSB) in the Goals 2000: Educate America Act established a mechanism for linking quality issues in adult education with standards for skills needed in the workplace. This linkage had also been made with the passage of the Job Training Partnership Act (JTPA) 10 years earlier in 1983. JTPA called for the development of both indicators of program quality and (program) performance standards. Section 106 of the JTPA called specifically for standards to assess "the increased employment and earnings of participants and the reduction in welfare dependency." Although the Department of Labor

developed initial (program) performance standards in 1983, these were modified in 1990 to include employment rate, weekly earnings, youth-entered-employment rate, and youth-employability-enhancement rate. Programs performing above specific, locally set levels on these indicators are eligible for incentive funding which is distributed by the states.

The National Literacy Act of 1991 (NLA) also requires states to develop *indicators of program quality* for adult education programs. Often called *performance* indicators, indicators of program quality are primarily intended to illustrate the effectiveness of adult education programs. Both the states and the federal government are currently required by law to develop indicators of adult education program quality. As detailed in the NLA, these indicators are to be used ". . . to determine whether programs are effective, including whether such programs are successfully recruiting, retaining and improving the literacy skills of individuals served in such programs" (Section 331 (a)(2)). In both the JTPA and the NLA, measures of program effectiveness are broadly defined to include not only program outcomes, but program inputs as well.

At the request of the U.S. Department of Education, Pelavin Associates produced several documents providing guidance to states for the development of the program quality indicators required by the NLA (Condelli, 1992; Condelli & Kutner, 1992). Although we were not able to conduct a thorough review of states' progress in developing these indicators, Iowa has published its Adult Basic Education Performance Measures and Performance Standards (ISDE, 1993). This is just one example of a state-level program quality indicator system created in response to the federal mandate. The Iowa Department of Education chose to include indicators for curricular and instructional processes, staff development, and student recruitment, in addition to the more traditional measure of program effectiveness, learners' educational gains.[1]

Among practitioners in the adult literacy field, the particular aspect of program quality that has been the focus of attention has been the capacity and quality of adult education teachers. Teachers are, arguably, the most important input in adult education programs. As such, the development of a high-skilled, well-trained teaching force will be a critical factor in improving adult learners' opportunities to learn. Currently, there is a general consensus in the field that adult literacy educators are not well prepared for their positions (Lytle, Belzer, & Reumann, 1992; Shanahan, Meehan, & Mogge, 1994). Foster (1990) attributes low teacher quality to, among other conditions, low compensation, few resources for professional development, the absence of a national organization for adult literacy educators, and the field's reliance on volunteer educators. Foster notes that "the job of helping individuals improve their literacy skills is a formidable one, which cannot be accomplished by a national cadre of untrained workers, no matter how good their intentions, or by volunteers alone" (1990, pp. 92-93). Her remedy is to develop standards for teaching practice in adult literacy education.

---

[1]Pelavin Associates is currently preparing a review of state efforts in developing program quality indicator systems. In addition, the National Institute for Literacy is working with several states to develop possible program outcome variables and ways to measure them. However, no documentation for either of these two projects was available at the time of this writing.

> For the quality of education and training instructors to be improved, agreement must be reached on the common elements of proficiencies needed by instructors . . . . We need to develop standards of practice that will guide instructors in what to teach, how to teach, how to be responsive to the goals, needs, and culture of the learner, and how to improve accountability. (Foster, 1990, pp. 79-80)

In this statement, Foster is actually calling for all types of standards, including content ("what to teach") and performance standards ("how to improve accountability"). But the rest of her suggestions could be considered OTL standards because they focus on inputs into adult education, particularly around the provision of teaching.

Many specialists, such as Foster, have recommended both national and state leadership to encourage the development of standards for the adult literacy profession. Yet, little has been accomplished on a large scale. Despite the surge of recent federal legislation in adult education that has emphasized the development of standards for adult literacy programs (see OTA, 1993), these initiatives have as yet had little impact on practitioners.

Shanahan, Meehan, and Mogge (1994) describe several of the obstacles inhibiting the professionalization of the adult literacy field. Adult literacy professionals themselves are not in agreement on what constitutes best practice in their field, nor are they convinced that training programs or activities can be developed that will significantly improve the quality of the workforce. Additionally, there is some debate about what impact more "qualified" teachers might have on the field and whether developing standards of practice might entail excessive government intervention. Underlying this debate is a lack of consensus on what qualities are required of adult literacy professionals and of adult literacy programs. While a discussion of OTL standards may help to bring the field closer to consensus on these issues, the likelihood of quick and easy solutions seems remote.

CHALLENGES

The driving force behind the movement toward standards for American education is the demand for accountability. But who is to be held accountable and for what? By defining desirable outcomes, educational standards determine what is to be measured for the purposes of accountability. The question of who will be held accountable for achieving desirable outcomes, whether it is educators or the government, is largely determined by who participates in the process of setting standards. The current demand for developing standards for adult literacy seems to emanate primarily from two sources: government policymakers and organizations representing the interests of business. It is largely through the influence of these two sets of stakeholders that the issues entailed in developing a system of standards for adult literacy have been defined and discussed. This relatively narrow base of interests raises a number of concerns. The authors of the NCTM volume on assessment standards (NCTM, 1993) summarized their concerns in this regard as follows:

- Are the reform visions held by the education community and policy makers really that similar – if it is hard for teachers to see the new vision clearly – how much more difficult is it for policy makers?
- Will the established conservative economic perspective dominate in the development of new assessment systems in spite of the critical, democratic view expressed by the math community?
- Is the political interest in reform, world class standards, and so forth a "political smokescreen" to mask real failures to face the decay of American schools and to "allow dominant groups to export the crisis from their own past decisions" and mount "an attack on egalitarian norms and values?" (Apple, 1992, p. 415) (NCTM, 1993, p. 236)

These concerns are not unique to mathematics. They highlight what is at stake in setting standards for adult literacy as well.

Many educators have been slow to recognize the force of the standards movement and this may have limited the influence that educational practitioners have had in the process of defining standards. Some who initially resisted the idea of standards have come to see the participation of all stakeholders in the standards-setting process as critical. DeFabio (1994), for example, introduces a book outlining standards for English/language arts by noting that she overcame her own reluctance to participate in standards setting when she realized that the question is no longer whether there will be standards, but who will set them. At present, it is difficult to discern what effect consideration of the interests of adult educators, adult learners, and the general public would have on the shape of standards for adult literacy, since these groups have thus far not been key participants in the standards policy debates. It seems likely, however, that the inclusion of the broader range of interests represented by these groups would have the effect of giving greater prominence to issues of equity, diversity, and coordination in the provision of adult basic education.

EQUITY

In writing about the equity issues raised by the NALS data, Reder (1993) concluded that two concerns, equity in outcomes and access to literacy learning in all its contexts, should be part of any effort to create standards for adult literacy. The standards to address these concerns might well be forms of performance standards and OTL standards that are unlike any that have been proposed to date. Unlike the program quality indicators specified in JTPA, NLA, and related legislation and policy at the state and local levels, OTL standards aimed at promoting equity in the outcomes of adult literacy learning would have to be designed to reflect the interests of adult learners. As noted above, these interests are likely to be rather different from those of government policymakers and business leaders. They may also be substantially different in terms of what are considered valued and valuable literacy knowledge and skills from the "middle class norms" that presently guide the majority of adult education programs (Davies, 1994).

COORDINATION

Closely related to the issue of providing equity in access to literacy learning is that of coordinating the efforts of the various institutions currently providing adult basic education. Beder (1991) and others (Haigler, 1990; OTA, 1993) have emphasized that a lack of communication among the numerous agencies that fund and provide adult literacy instruction at the national, state, and local levels is a major obstacle to program effectiveness.

Adult literacy instruction in the United States is provided by a variety of public education agencies as well as by community-based and volunteer organizations (see Venezky & Wagner, 1994). The recently completed NEAEP conducted for the U.S. Department of Education by Development Associates (Young et al., 1994) reports that more than 2,800 programs are supported by federal funding. The majority of these programs (69%) are operated by public school systems. Community colleges operate another sizable portion (17%) of programs receiving federal support. The NEAEP report also highlights the diversity of the clientele served by adult basic education (ABE), adult secondary education (ASE), and adult English as a second language (ESL) programs. Davies (1994) cites a number of works (Hunter & Harman, 1979; Kozol, 1985; Mezirow, Darkenwald, & Knox, 1975) that have pointed to the fact that those adult literacy programs that rely most heavily on government funding, particularly programs found in community colleges, universities, and adult high school classes, are serving the "cream" of the adult nonreading public. National standards are needed that hold these programs accountable for equity in access and outcomes, but the sheer mass of paperwork already imposed upon such programs by the maze of agencies and funding sources that they must deal with may make the imposition of another set of reporting requirements unduly burdensome.

DIVERSITY

Another set of challenges to standards setting for adult literacy are those raised by the cultural and linguistic diversity of the American population. One of the primary challenges in setting standards for public elementary and secondary education has centered around issues of equity for culturally and linguistically diverse students. In adult literacy programs, meeting the needs of these particular students is paramount. Nearly half of all adult education students are studying English as a Second Language, and 40% of students in adult basic and secondary education are African American or Hispanic (Young et al., 1994). Faced with such diversity, both critics and supporters of the national standards movement have expressed concern in two main areas: delivery of educational services and assessment.

Recent standards-setting panels have been criticized for the homogeneity of their membership and their assumptions that all children are alike (Gonzalez, 1993). Underlying these criticisms is the concern that the standards-setting process will further infuse the curriculum with pedagogy and policy that has consistently marginalized diverse students and resulted in their generally low educational achievement. It is likely that the early stages of the implementation of standards will disadvantage racial and ethnic minority students, limited-English-proficient students, and female students (Pullin, 1994), in part, because of the effect standards may have in sustaining or creating educational environments that are insensitive to the home cultural communications styles of many students (Erickson, 1987).

Equity advocates want to insure that standards-setting processes do not embed these inequities into the curriculum.

Beyond their misgivings about the potential effects of performance and content standards, those who advocate equity in education generally agree that OTL standards are necessary. Simmons (1993) notes, for example, that the lack of attention to delivery (OTL) standards at the national level has particularly important implications for minority and disadvantaged students. In the face of well-documented inequities in resources (Kozol, 1991), it would be unfair to hold all students to the same standards when all do not have the same opportunity to learn. Yet, parents of culturally and linguistically diverse children typically reject the idea of setting different standards for these groups (Gonzalez, 1993). The solution to improving education for all children and adults, especially poor and minority learners, may be in setting OTL standards that provide clear guidance without being unduly restrictive (see Simmons, 1993).

CONCLUSIONS

This paper identifies a number of issues that have been raised or are likely to be raised in the initial phases of the process of developing standards for adult literacy. Whether a comprehensive system of standards for adult literacy is desirable remains an open question. With the recent election of Republican majorities to both houses of Congress, a Senate vote to reject proposed curricular standards for history, and the general drive to constrict federal intervention in state and local affairs, the fate of standards-based education reform remains uncertain. Although the standards movement may have lost some of its momentum, the debates over standards can be expected to continue.

Due to the fragmentation of the field, framing and engaging in debates over adult literacy standards have been particularly difficult. The discourse of adult literacy standards reflects this fragmentation. The terms *content standards* and *OTL standards* have typically not been used, even in the contexts of efforts to define desirable knowledge and skills and to define indicators of program quality. The term *performance standards* has been used inconsistently and too generally, with the result that the measures of student outcomes have often been conflated with measures of program quality and opportunity to learn. In this paper, we have tried to separate issues in the development of content, performance, and OTL standards for adult literacy and to highlight topics for further discussion and debate in each of these domains. We have also identified several issues that pose particular challenges to the development of standards for adult literacy: equity, diversity, and coordination. Below, we summarize our main points:

- Goals 2000 and related national level policies call for the development of a voluntary system of content, performance, and opportunity-to-learn standards as ways of raising expectations and making schools and students accountable for higher levels of performance.
- Content standards are definitions of desirable knowledge and skills. In the field of adult literacy, preliminary efforts to define content standards have focused on definitions of

workplace competencies (e.g., SCANS) and relatively little attention has been given to more broadly defined conceptions of functional literacy knowledge and skills. Discussions of content standards that are related to more general literacy competencies will be valuable even if consensus on a single definition of literacy is not achievable.

- Performance standards are criteria for establishing measures of "how much" knowledge is enough. Although NALS represents advancement in the assessment of functional literacy skills, work is needed to develop more authentic, performance-based assessments of literacy. Development in the technology of literacy assessment may well be the single most important factor in determining the success of standards-based reforms for the field.
- Opportunity-to-learn (OTL) standards define expectations for school inputs (resources) and processes (best practices), as ways of ensuring equal opportunities for all students to achieve at high levels. Within the field of adult literacy, efforts to develop OTL standards have been focused on the areas of program quality indicators and professionalization. The design of accountability systems for adult literacy education will further work in these areas as well as work on content and performance standards.
- The particular characteristics of the field of adult literacy call for the development of new forms of standards to meet the needs of assuring equity in access and outcomes, coordination of service provision, and sensitivity to the learning needs of an increasingly diverse population.
- The stakes in standards setting are high, and there is a need for broader participation by all stakeholders in adult literacy standards-setting efforts. Adult educators and adult learners have a special stake in standards and need to be actively involved in all areas of standards setting for adult literacy.

Within current American educational standards reform efforts, a variety of forms of standards are being designed to serve the purposes of defining clear and high expectations for achievement and of developing accurate and fair mechanisms for accountability. What constitutes excellence and how best to ensure that all have the opportunity to excel are the fundamental questions that drive the standards conversation. There are no final answers to these questions. In the field of adult literacy, discussions of standards have been initiated in a number of different circles. These circles need to be joined and expanded to include the voices of all stakeholders. Acrimonious debate will be unavoidable in dealing with the issues and challenges posed by content, performance, OTL, and other forms of adult literacy standards, and full consensus is improbable. However, broad-based discussions of standards for adult literacy will provide rare opportunities for ongoing and critical exchanges of views on questions of vital concern to all who have an interest in improving literacy among adult Americans.

REFERENCES

Adams, M. J. (1990). *Beginning to read: Thinking and learning about print.* Cambridge, MA: MIT.

Alamparese, J. A. (1990). Strengthening the knowledge base in adult literacy. In F. P. Chisman (Ed.), *Leadership for literacy: The agenda for the 1990s* (pp. 96-121). San Francisco: Jossey-Bass.

Alexander, L. (1986). *Time for results: The Governors' 1991 report on education.* Washington, DC: National Governors' Association.

Apple, M. W. (1992). Thinking more politically about the challenges before us: A response to Romberg. *Journal of Research in Mathematics Education, 23*, 438-440.

Apple, M. W. (1993). The politics of official knowledge: Does a national curriculum make sense? *Teachers College Record, 95*(2), 222-241.

Ball, D. L. (1992). *Implementing the NCTM standards: Hopes and hurdles* (Issue Paper 92-2). East Lansing, MI: The National Center of Research on Teacher Learning.

Barton, D. (1994). The social impact of literacy. In L. Verhoeven (Ed.), *Functional literacy: Theoretical issues and educational implications* (pp. 185-198). Philadelphia: John Benjamins.

Beder, H. (1991). *Adult literacy: Issues for policy and practice*. Malabar, FL: Krieger.

Berenbeim, R. E. (1991). *Corporate support of the National Education Goals*. New York: The Conference Board.

Berenbeim, R. E. (1993). *Corporate support of dropout prevention and work readiness*. New York: The Conference Board.

Bottani, N., & Tuijnman, A. (1994). The design of indicator systems. In A. Tuijnman & T. Postlethwaite (Eds.), *Monitoring the standards of education* (pp. 47-78). Tarrytown, NY: Pergamon.

Business Council for Effective Literacy (BCEL). (1992). Talking heads: Issues and challenges in adult literacy. *Newsletter*, 1, 6-7, 16.

Campbell, A., Kirsch, I. S., & Kolstad, A. (1992). *Assessing literacy: The framework for the National Adult Literacy Survey*. Washington, DC: U.S. Government Printing Office.

Chisman, F. P., & Campbell, W. L. (1990). Narrowing the job-skills gap: A focus on workforce literacy. In F. P. Chisman (Ed.), *Leadership for literacy: The agenda for the 1990s* (pp. 144-170). San Francisco: Jossey-Bass.

Condelli, L. K. (1992). *Quality indicators, measures and performance standards*. Washington, DC: Pelavin Associates.

Condelli, L. K., & Kutner, M. (1992). *Quality indicators for adult education programs: Lessons learned from other programs*. Washington, DC: Pelavin Associates.

Darling-Hammond, L. (1994). Performance-based assessment and educational equity. *Harvard Educational Review, 64*(1), 5-30.

Davies, D. (1994). Adult literacy programs: Toward equality or maintaining the status quo? In M. C. Radencich (Ed.), *Adult literacy* (pp. 17-22). Newark, DE: International Reading Association.

DeFabio, R. Y. (1994). *Outcomes in process: Setting standards for language use*. Portsmouth, NH: Bounton Cook.

Eisner, E. W. (1993). Why standards may not improve schools. *Educational Leadership, 50*(5), 22-23.

Erickson, F. (1987). Transformation and school success: The politics and culture of educational achievement. *Anthropology and Education Quarterly, 18*(4), 335-356.

Foster, S. E. (1990). Upgrading the skills of literacy professionals: The profession matures. In F. P. Chisman (Ed.), *Leadership for literacy: The agenda for the 1990s* (pp. 73-95). San Francisco: Jossey-Bass.

Gonzalez, R. D. (November, 1993). *National standards and culturally/linguistically diverse students: A question of equity*. Paper presented at the annual meeting of the National Council of Teachers of English, Pittsburgh, PA.

Guthrie, J. T., & Greaney, V. (1991). Literacy acts. In R. Barr, M. Kamil, P. Mosenthal, & P. D. Pearson (Eds.), *Handbook of Reading, Volume 2* (pp. 68-96). New York: Longman.

Haigler, K. O. (1990). Building ties among literacy programs: Achieving strength through cooperation. In F. P. Chisman (Ed.), *Leadership for literacy: The agenda for the 1990s* (pp. 51-72). San Francisco: Jossey-Bass.

Herman, J. L., Aschbacher, P. R., & Winters, L. (1992). *A practical guide to alternative assessment*. Alexandria, VA: ASCD.

Hunter, C. S. J., & Harman, D. (1979). *Adult literacy in the United States*. New York: McGraw-Hill.

Husen, T., & Tuijnman, A. (1994). Monitoring standards in education: Why and how it came about. In A. Tuijnman & T. N. Postlethwaite (Eds.), *Monitoring the standards of education* (pp. 1-22). New York: Pergamon.

Iowa State Department of Education (ISDE). (1993). *Performance indicators of program quality for Iowa's Adult Basic Education Programs*. Iowa State Department of Education.

Kirsch, I. S., & Jungeblut, A. (1986). *Literacy: Profiles of America's young adults*. Princeton, NJ: National Assessment of Educational Progress.

Kirsch, I. S., Jungeblut, A., Jenkins, L., & Kolstad, A. (1993). *Adult literacy in America: A first look at the results of the National Adult Literacy Survey*. Washington, DC: U.S. Government Printing Office.

Kozol, J. (1985). *Illiterate America*. New York: Anchor/Doubleday.

Kozol, J. (1991). *Savage inequalities*. New York: Crown.

Latham, A., & Reese, C. (1995, April). *The workplace literacy tests: Current uses in the field and suggestions for future research*. Paper presented at the meeting of the American Educational Research Association, San Francisco, CA.

Leseman, P. (1994). Socio-cultural determinants of literacy development. In L. Verhoeven (Ed.), *Functional literacy: Theoretical issues and educational implications* (pp. 163-184). Philadelphia: John Benjamins.

Levine, K. (1986). *The social context of literacy*. London: Routledge & Kegan Paul.

Lewis, A. C. (1992). House bill includes school delivery standards. *Phi Delta Kappan* (October 1992), 100-101.

Linn, R. L., Baker, E. L., & Dunbar, S. B. (1991). Complex performance-based assessments: Expectations and validation criteria. *Educational Researcher, 20*(8), 15-21.

Lund, L., & McGuire, E. P. (1990). *Literacy in the work force*. New York: The Conference Board.

Lund, L., & Wild, C. (1993). *Ten years after A Nation at Risk* . New York: The Conference Board.

Lytle, S. L. (1991). Living literacy: Rethinking development in adulthood. *Linguistics and Education, 3*, 109-138.

Lytle, S. L., Belzer, A., & Reumann, R. (1992). *Invitation to inquiry: Rethinking staff development in adult literacy education* (No. TR92-02). Philadelphia: University of Pennsylvania, National Center on Adult Literacy.

Messick, S. (1994). The interplay of evidence and consequences in the validation of performance assessments. *Educational Researcher 23*(2), 13-23.

Mezirow, J., Darkenwald, G. G., & Knox, A. B. (1975). *Last gamble on education.* Washington, DC: Adult Education Association.

National Academy of Education. (1993). *Setting performance standards for student achievement.* Stanford, CA: Stanford University, The National Academy of Education.

National Commission on Excellence in Education. (1983). *A nation at risk: The imperative for educational reform.* Washington, DC: U.S. Department of Education.

National Council on Educational Standards and Testing (NCEST). (1992). *Raising standards for American education: A report to Congress, the Secretary of Education, the National Education Goals Panel, and the American people.* Washington, DC: U.S. Government Printing Office.

National Council of Teachers of Mathematics (NCTM). (1993). *Assessment standards for School Mathematics* (Working Draft). Reston, VA: Author.

National Education Goals Panel (NEGP). (1994). *Building a nation of learners: The 1994 National Education Goals report.* Washington, DC: National Education Goals Panel.

Office of Technology Assessment, U.S. Congress (OTA). (1993). *Adult literacy and new technologies: Tools for a lifetime* (OTA-SET-550). Washington, DC: U.S. Government Printing Office.

Office of Vocational and Adult Education, U.S. Department of Education (OVAE). (1992). *Study of occupational skill standards.* Washington, DC: U.S. Government Printing Office.

O'Neil, H., Allred, K., & Baker, E. (1992). *Measurement of workforce readiness: Design of prototype measures.* Los Angeles: National Center for Research on Evaluation, Standards, and Student Testing.

O'Neil, J. (1993). Can national standards make a difference? *Educational Leadership, 50*(5), 4-8.

Pearson, P. D. (1993). Standards for the English language arts: A policy perspective. *Journal of Reading Behavior, 25*(4), 457-475.

Porter, A. (1993). School delivery standards. *Educational Researcher, 22*(5), 24-29.

Pullin, D. C. (1994). Learning to work: The impact of curriculum and assessment standards on educational opportunity. *Harvard Educational Review, 64*(1), 31-54.

Reder, S. (1993, February). NALS raises vital equity issues. *NCAL Connections, 1*, 7-8.

Resnick, D., & Resnick, L. (1977). The nature of literacy: A historical explanation. *Harvard Educational Review, 47*, 370-385.

Secretary's Commission on Achieving Necessary Skills, U.S. Department of Labor (SCANS) (1991). *What work requires of schools: A SCANS report for America 2000.* Washington, DC: U.S. Government Printing Office.

Shanahan, T., Meehan, M., & Mogge, S. (1994). *The professionalization of the teacher in adult literacy education* (TR94-11). Philadelphia: University of Pennsylvania, National Center on Adult Literacy.

Simmons, W. (1993). The National Education Goals: Implications for African-Americans and other minorities. In *The Issues of Language and Culture: Proceedings of a Symposium*

Convened by the Center for Applied Linguistics (p. 13). Washington, DC: Center for Applied Linguistics.

Simmons, W., & Resnick, L. (1993). Assessment as the catalyst of school reform. *Educational Leadership, 50*(5), 11-15.

Street, B. V. (1984). *Literacy in theory and practice*. Cambridge: Cambridge University Press.

Thomas, R. M. (1994). Approaches to selecting and setting achievement standards. In A. C. Tuijnman & T. N. Postlethwaite (Eds.), *Monitoring the standards of education* (pp. 121-132). Tarrytown, NY: Pergamon.

Venezky, R. L. (1992). *Matching literacy testing with social policy: What are the alternatives?* (Policy Brief No. PB92-01). Philadelphia: University of Pennsylvania, National Center on Adult Literacy.

Venezky, R. L., & Wagner, D. A. (1994). *Supply and demand for literacy instruction in the United States* (TR94-10). Philadelphia: University of Pennsylvania, National Center on Adult Literacy.

Venezky, R. L., Wagner, D. A., & Ciliberti, B. S. (Eds.). (1990). *Toward defining literacy*. Newark, DE: International Reading Association.

Verhoeven, L. (Ed.). (1994). *Functional literacy: Theoretical issues and educational implications*. Philadelphia: John Benjamins.

Wagner, D. A. (1993). *Myths and misconceptions in adult literacy: A research and development perspective* (Policy Brief No. PB93-01). Philadelphia: University of Pennsylvania, National Center on Adult Literacy.

Whetzel, D. (1993). The Secretary of Labor's Commission on Achieving Necessary Skills. In *Striving for excellence: The National Education Goals* (pp. 77-78). Washington, DC: ERIC.

Young, M. B., Morgan, M., Fitzgerald, N., & Fleischman, H. (1994). *National Evaluation of Adult Education Programs. Final report* (draft). Arlington, VA: Development Associates, Inc.